of waterfalls. Even more amazing are two semiterrestrial species that have abandoned streams altogether and breed in water that collects in the bases of leaves of climbing vines and lilies. The larvae use these small pockets of water to capture and feed on other insects and small snails. The most extreme case is the completely terrestrial *Megalagrion oahuense*, a Hawaiian damselfly that has abandoned not only the streams but also the leaf pockets. Its hairy larvae live in damp leaf litter under banks of uluhe ferns in the wet upper-elevation rainforests on the island of Oahu. This species has completely lost the ability to breed in water.

The diversity of breeding habitats among *Megalagrion* damselflies has recently been used by researchers with the U.S. Geological Survey at Hawaii Volcanoes National Park. USGS ecologists are measuring how communities of damselflies change in response to moisture stress and temperature change. They are observing systematic shifts in damselfly community composition associated with changing hydrologic conditions. In this way, Hawaiian damselflies are serving as a focal group to better understand the consequences of long-term climate change.

Major threats to Hawaiian damselflies include habitat degradation and alien species introductions. Lower- and mid-elevation aquatic habitats are often invaded by alien fish that prey on the damselfly larvae. On Oahu, the endemic orange-black damselfly (*M. xanthomeles*) is a proposed threatened species and the focus of ongoing conservation efforts. It is being restored to low-elevation breeding sites that are free of alien fishes, and is also being studied at Kaloko Honokohau National Historical Park on the island of Hawaii, where the species breeds in rare coastal pools that are threatened by upslope industrial development. This is another example of how *Megalagrion* can serve as sentinels of ecosystem health in a wide range of unique habitats in national parks of Hawaii.

The odonates are important ecological, scientific, and educational park resources. Information from inventory and monitoring applied to management practices will reduce risks to odonates and other invertebrates and their habitats. In addition, this information is valuable for addressing threatened and endangered species issues and the conservation, planning, and management of freshwater aquatic ecosystems. ■

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award-winner

Doug Smith heads wolf restoration project

For his leadership in the restoration of the gray wolf in the northern Rocky Mountains, Dr. Doug Smith received the Director's Award for Natural Resource Management. As Wolf Project leader, Doug has played a major role in the success of this venture. (See *Natural Resource Year in Review—2001*, page 51.) This project serves as a model for how to restore, manage, monitor, and live with a large predator, and has far-reaching implications for the restoration of wildlife worldwide.

When the wolves were first brought from Canada in 1995 and 1996, Doug managed their care in the acclimation pens and has continued to do so since their release, developing procedures to restrict human use around active wolf dens, managing nuisance wolves outside the park, and investigating wolf fatalities. Monitoring wolves is difficult but crucial to this project. Doug devised innovative long-term wolf monitoring and research procedures. His winter study strategy has allowed investigators to closely observe wolves making kills and interacting among themselves and with other species. These data have led to the development of statistical methods for estimating how often wolves kill large prey.

Armed with this kind of information, Doug and fellow project advocates can rebut charges from angry opponents of the project that the wolves are decimating the elk herds, and that their population is exploding. His many outreach activities are important for winning support and raising funds. He is an educator about wolves, making presentations to lay audiences, teaching wildlife education courses, mentoring graduate students, and contributing articles to journals and books. He has integrated more than 150 volunteer scientists into the park's management and research programs, and through the Yellowstone Visiting Scholars Program has welcomed wildlife biologists from around the country and abroad.

Dr. Doug Smith receives the Director's Award for Natural Resource Management from Dr. Lee Talbot, a coauthor of the Endangered Species Act, and Yellowstone Center for Resources Director John D. Varley.

Growing up in rural Ohio, Doug says, "My interest in nature and remote places was nurtured by my father and then focused on wolves when my brother bought me the classic book *The Wolf* by L. David Mech," prompting him, at age 16, to write Mech asking for a job. Now, a few decades later, young people are contacting Doug with aspirations of working with wildlife in remote places. ■